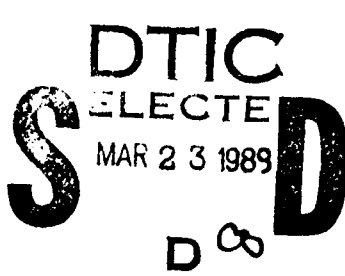


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FINAL REPORT FOR AFOSR-87-0060

\$250K was awarded by the DoD-University Instrumentation program for the establishment of an Electron Beam Lithography facility at UCSD. This award together with a \$50K grant from NSF (EET87-04868), \$700K from UCSD's new engineering building equipment fund and a \$250K donation from Cambridge Instrument Corporation, allowed us to place a purchase order for the Cambridge EBMF 10.5 electron beam writing system in late September, 1987. The system was delivered to our new engineering building in August 1988 and installed there over a three-month period. After having completed various testing procedures we finally accepted the system on February 2, 1989. To operate and maintain the system, an experienced engineer (Mr. Robert Stein) has been employed; Mr. Stein earlier worked at the Science Center of Rockwell International at Thousand Oaks, Ca. in a similar capacity for more than four years before coming to UCSD. This electron beam writer will be used to produce high resolution, large space bandwidth product holographic optical elements (which are versatile, passive components of opto-electronic systems), to fabricate fast, compact, active opto-electronic devices and to make masks for high speed millimeter wave devices or high frequency integrated circuits, as described in the original proposal.

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